

**Oroville Facilities Relicensing Program**  
**Federal Energy Regulatory Commission Project No. 2100**  
**Study Plan Reports Completed or Delivered to the Collaborative**  
**(153 Reports have been delivered as of March 31, 2005)**

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**Cultural Resources**

C1	F.R. Cultural Resources Ethnographic Inventory - Public	02/04
	F.R. Cultural Resources Archaeological and Historical Site Inventory - Public	07/04
	F.R. Cultural Resources Ethnographic Inventory Report - Confidential	07/04
	D.R. Cultural Resources Archaeological and Historical Site Inventory - Confidential	08/04
C2	F.R. Historic Properties Inventory and Evaluation: Oroville Facilities, Butte County - Confidential	07/04
C3/C4	P.D. Historic Properties Management Plan/Interpretive Evaluation	12/04

**Engineering and Operations**

E1	Model Development	06/03
E1.1	Statewide Operations Model Development	06/03
E1.2	Local Operations Model Development (Final Enhancements Completed) - Confidential	08/03
E1.3/E1.4/E1.5	Oroville Reservoir/Thermalito Complex/Feather River Temperature Model Development I.R. Temperature Model Presented to Engineering & Operations Work Group	04/03
E1.6	Feather River Flow-Stage Model Development	04/03
E2	Perform Modeling Simulations Operations Modeling Seminar #1 Operations Modeling Workshop #2 Operations Modeling Workshop #3 Operations Modeling Workshop #4 Operations Modeling Workshop #5 Benchmark Study Results for CALSIM II, HYDROPS & WQRRS PDEA Alternatives Analysis and Simulations	06/03 08/03 10/03 02/04 04/04 09/04 12/04
E3	D.R. Evaluate the Potential for Additional Hydropower Generation at Oroville (Executive Summary) D.R. Evaluation of Potential Generation Improvements - CEII Document - Confidential	05/04 05/04
E4	F.R. Flood Management Study	12/04
E6	Downstream Extent of Reasonable Control of Feather River Temperature by Oroville - Thermalito	10/03
E7A	D.R. Oroville Reservoir Cold Water Pool Availability Analysis	05/03

**Environmental – Fisheries**

F1	Evaluation of Project Effects on Non-Fish Aquatic Resources I.R. Task 1 - Evaluation of Project Effects on Non-Fish Aquatic Resources F.R. Tasks 1/Task 2 - Evaluation of Project Effects on Non-Fish Aquatic Resources	04/03 08/04
F2	Evaluation of Project Effects on Fish Diseases I.R. Phase 1 - Initial Progress Report on the Evaluation of Project Effects on Fish Diseases D.R. Task 1/Task 2 - Evaluation of Project Effects on Fish Diseases F.R.	11/02 03/03 06/04
F3.1	Evaluation of Project Effects on Resident Fish and their Hab within Lake Oroville, its Upstream Tributaries, the Thermalito Complex, and the Oroville Wildlife Area F.R. Task 1A - Assessment of Potential Fish Passage Impediments above Lake Oroville's High Water Mark F.R. Task 1B - Fish Species Composition in Lake Oroville's Upstream Tributaries F.R. Task 1C, F15 Task 2 - Inventory of Potentially Available Habitat, and Distribution of Juvenile and Adult Fish Upstream from Lake Oroville I.R. Task 1C and F3.2 Task 4A - Fish Habitat GIS Coverage (GIS Maps) F.R. Task 2A/Task 3A - Fish Species Composition: Lake Oroville, Thermalito Diversion Pool, & Thermalito Forebay F.R. Task 2B - Evaluation of the Ability of Lake Oroville's Cold Water Pool to Support Salmonid Stocking Recommendations I.R. Task 2C - Evaluation of Lake Oroville's Water Surface Elevation Reductions on Bass Spawn Success F.R. Task 2D - Management Practices and Monitoring Studies of White Sturgeon	05/04 12/04 06/04 06/03 07/03 03/03 12/02 12/02

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Environmental – Fisheries (continued)

F3.1	Evaluation of Project Effects on Resident Fish and their Hab within Lake Oroville, its Upstream Tributaries, the Thermalito Complex, and the Oroville Wildlife Area - continued	
	F.R. Task 3B/Task 3C - Project Operations Influencing Fish Habitat and Water Quality in the Thermalito Diversion Pool and Thermalito Forebay	05/04
	F.R. Task 4A - Fish Species Composition and Evaluation of Juvenile Bass Recruitment in the Thermalito Afterbay	12/04
	F.R. Task 4B - Characterization of Cold Water Pool Availability in the Thermalito Afterbay	02/04
	F.R. Task 4C - Evaluation of Water Surface Fluctuations on Bass Nest Dewatering and Characterization of Inundated Littoral Habitat in the Thermalito Afterbay	08/04
	I.R. Task 5A - One-Mile Pond Fish Species Composition	11/03
	I.R. Task 5B - Characterization of Fish Habitat in One-Mile Pond	02/04
F3.2	Evaluation of Project Effects on Resident Fish and their Habitat in the Feather River Downstream of the Fish Barrier Dam	
	F.R. Task 1/Task 4/Task 5 - Comparison of Fish Distribution to Habitat Distribution and Maps (by species)	08/04
	D.R. Task 1 and F21 Task 2 - Fish Distribution in the Feather River below the Thermalito Diversion Dam to the Confluence with the Sacramento River	01/03
	I.R. Task 2 and F21 Task 1 - Literature Review of Life History and Habitat Requirements for Feather River Fish Species	01/03
	F.R. Task 2, F15 Task 1, and F21 Task 1 - Literature Review of Life History and Habitat Requirements for Feather River Fish Species	04/04
	F.R. Task 3A - Final Assessment of Potential Sturgeon Passage Impediments	09/03
	F.R. Task 3A - Final Assessment of Sturgeon Distribution and Habitat Use	12/03
	F.R. Task 3B - Assessment of Potential Project Effects on Splittail Habitat	07/04
	I.R. Task 4A and F3.1 Task 1C - Fish Habitat GIS Coverage (GIS Maps)	06/03
F5/7	Evaluation of Potential Effects of Fisheries Management Activities on ESA-Listed Fish Species	
	F.R. Task 1 - Evaluation of Potential Effects of Fisheries Management Activities on ESA-Listed Fish Species	05/04
	F.R. Task 2 - Evaluate the Achievement of Current Stocking Goals	09/04
	F.R. Task 3 - Evaluate the Interaction between the Lake Oroville Fishery & Upstream Tributary Fisheries	12/04
F8	Transfer of Energy and Nutrients by Anadromous Fish Migrations	
	D.R. Transfer of Energy and Nutrients by Anadromous Fish Migrations	04/03
	D.R. Revised - Transfer of Energy and Nutrients by Anadromous Fish Migrations	09/03
	Summary of Revisions to SP-F8 Technical Report	09/03
F9	Evaluation of Project Effects on Natural Salmonid Populations	
	Phase 1 - Interim Literature Review	11/02
	Phase 1 Revised Interim Literature Review	03/03
	D.R. The Effects of the Feather River Hatchery on Naturally Spawning Salmonids	11/04
F10	Evaluation of Project Effects on Salmonids and Their Habitat in the Feather River below the Fish Barrier Dam	
	I.R. Task 1C - Evaluation of Flow-Related Physical Impediments in the Feather River below the Fish Barrier Dam	01/03
	I.R. Task 1E - Pre-Spawning Chinook Salmon Migration Patterns and Holding Characteristics	03/04
	I.R. Task 1E - Identification and Characterization of Early Up-Migrant Chinook Salmon Holding Habitat and Habitat Use Patterns	04/03
	F.R. Task 1D/Task 1E - Evaluation of Oroville Facilities Operations on Water Temperature Related Effects on Pre-Spawning Adult Chinook Salmon And Characterization of Holding Habitat	07/04
	F.R. Task 2A - Evaluation of Spawning and Incubation Substrate Suitability for Salmonids in the Lower Feather River	07/04
	I.R. Task 2B - Steelhead Spawning Methods	05/03
	F.R. Task 2B - Evaluation of Potential Effects of Oroville Facilities Operations on Spawning Chinook Salmon	07/04
	I.R. Task 2B - 2003 Lower Feather River Steelhead Redd Survey	07/03
	F.R. Task 2C - Evaluation of the Timing, Magnitude and Frequency of Water Temperatures and Their Effects on Chinook Salmon Egg and Alevin Survival	07/04
	F.R. Task 2D - Evaluation of Flow Fluctuation Effects on Chinook Salmon Redd Dewatering in the Lower Feather River	07/04
	F.R. Task 3A - Distribution and Habitat Use of Juvenile Steelhead and other Fishes of the Lower Feather River	04/04
	I.R. Task 3A - Distribution and Habitat Use of Steelhead and Other Fishes in the Lower Feather River	01/03
	F.R. Task 3B - Growth Investigations of Wild and Hatchery Steelhead in the Lower Feather River	02/04
	I.R. Task 3B - Growth Investigations of Wild Juvenile Steelhead in the Feather River using Mark and Recapture Techniques	06/03
	I.R. Task 3B - Steelhead Rearing Temperatures	07/03
	F.R. Task 3C - Juvenile Steelhead and Chinook Salmon Stranding in the Lower Feather River	08/04
	I.R. Task 3C - Redd Dewatering and Juvenile Steelhead and Chinook Salmon Stranding in Lower Feather River	06/03
	F.R. Task 4A - River Flow Effects on Emigrating Juvenile Salmonids in the Lower Feather River	12/03

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**Environmental – Fisheries (continued)**

F10	Evaluation of Project Effects on Salmonids and Their Habitat in the Feather River below the Fish Barrier Dam - continued	
	I.R. Task 4A - Literature Review of Devices Used for Enumeration of Juvenile Steelhead Outmigrants	01/03
	F.R. Task 4B - Timing, Thermal Tolerance Ranges and Potential Water Temperature Effects on Emigrating Juvenile Salmonids in the Lower Feather River	10/03
F15	Evaluation of the Feasibility to Provide Passage for Anadromous Salmonids Past Oroville Facility Dams	
	F.R. Task 1, F3.2 Task 2 and F21 Task 1 - Literature Review of Life History and Habitat Requirements for Feather River Fish Species	04/04
	F.R. Task 2, F3.1 Task 1C - Inventory of Potentially Available Habitat, and Distribution of Juvenile and Adult Fish Upstream from Lake Oroville	06/04
	F.R. Task 3 - Evaluation of Methods and Devices Used in the Capture, Sorting, Holding, Transport and Release of Fish	06/04
	F.R. Task 4 - Fish Passage Model	01/04
	F.R. Task 4 - Fish Passage Model (amended Appendix A)	11/04
F16	Evaluation of Project Effects on Instream Flows and Fish Habitat	
	D.R. Phase 1	07/02
	F.R. Phase 2	02/04
	Addendum to Phase 2 Report – Evaluation of Project Effects on Instream Flows and Fish Habitat	01/05
F21	Project Effects on Predation of Feather River Juvenile Anadromous Salmonids	
	I.R. Task 1 and F3.2 Task 2 - Literature Review of Life History and Habitat Requirements for Feather River Fish Species	01/03
	F.R. Task 1, F3.2 Task 2, and F15 Task 1 - Literature Review of Life History and Habitat Requirement for Feather River Fish Species	04/04
	D.R. Task 2 and F3.2 Task 1 - Fish Distribution in the Feather River below Thermalito Diversion Dam to the Confluence with the Sacramento River	01/03
	F.R. Task 3 - Incorporate Results of Tasks 1 and 2	05/04
	I.R. Task 4 - Predation PM&E Literature Review	02/03
	Environmental Study Report Comments and Errata	01/05

**Environmental – Geomorphic**

	Paleontologic Resources in the Vicinity of FERC Project 2100 (Oroville Reservoir and Lower Feather River):	
	Literature-Based Inventory and Significance Assessment - Public	01/05
	Literature-Based Inventory and Significance Assessment - Confidential	01/05
G1	Effects of Project Operations on Geomorphic Processes Upstream of Oroville Dam	
	I.R. Task 2 - Map the Channel Resources in the Tributaries above Oroville Dam and Task 3 - Re-Survey Reservoir Cross-Sections and Determine Sediment in Storage	04/03
	F.R.	04/04
G2	Effects of Project Operations on Geomorphic Process Downstream of Oroville Dam	
	I.R.	04/03
	F.R. Task 1.1 - Bibliography and Index	06/04
	F.R. Task 1.2 - Physiographic Setting and Mesohabitat	04/04
	F.R. Task 2 - Spawning Riffle Characteristics	08/04
	F.R. Task 3/Task 4 - Channel Cross-Sections and Photography	09/04
	F.R. Task 5 - Dam Effects on Channel Hydraulics and Geomorphology and Task 8 - Summary and Conclusions	07/04
	F.R. Task 6 - Channel Meanders and Bank Erosion Monitoring	07/04
	D.R. Task 7 - Hydraulic and Sediment Transport Modeling with Fluvial 12	03/04

**Environmental - Terrestrial**

T1	F.R. Effects of Project Operations and Features on Wildlife and Wildlife Habitat	04/04
T2	Project Effects on Special Status Species	
	F.R. Project Effects on Special Status Wildlife Species	02/04
	F.R. Project Effects on Special Status Plant Species	03/04
T3/5	F.R. Project Effects on Riparian Resources, Wetlands, and Associated Floodplains	07/04
T4	F.R. Biodiversity, Vegetation Communities, and Wildlife Habitat Mapping	12/03

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**Environmental – Terrestrial (continued)**

T6	I.R. Interagency Wildlife Management Coordination and Wildlife Management Plan Development	02/04
T7	F.R. Project Effects on Noxious Terrestrial and Aquatic Plant Species	06/04
T8	F.R. Project Effects on Non-Native Wildlife	09/03
T9	F.R. Recreation and Wildlife	06/04
T10	F.R. Effects of Project Features, Operation and Maintenance on Upland Plant Communities	08/04
T11	F.R. Effects of Fuel Load Management and Fire Prevention on Wildlife and Plant Communities	10/03

**Environmental – Water Quality**

W1	Project Effects on Water Quality Designated Beneficial Uses for Surface Waters F.R. Revised	09/04
W2	Contaminant Accumulation in Fish, Sediments, and the Aquatic Food Chain D.R. Phase 1	02/04
W3	Recreational Facilities and Operations Effects on Water Quality I.R. Task 1 - Effects of Current Recreation Facilities and Operations and Task 1A - Identification of Potential Effects to Water Quality F.R. Task 1B - First Year of Monitoring	11/02 08/04
W5	Project Effects on Groundwater I.R. Task 1, Phase 1 - Inventory Existing Wells and Assessment of Existing Groundwater Data and Current Groundwater Monitoring Activities D.R. Task 1, Phase 1 - Inventory Existing Wells and Assessment of Existing Groundwater Data and Current Groundwater Monitoring Activities (Revised) D.R. Task 1 D.R. Task 2 - Hyporheic Monitoring	01/03 05/03 03/04 11/04
W6	Project Effects on Temperature Regime F.R.	07/04
W7	Land and Watershed Management Effects on Water Quality I.R. F.R. Task 1 - Effects to Water Quality from Ongoing Land Uses and Management, and Task 1B - Monitoring of Potential Effects to Water Quality	02/03 08/04
W9	Project Effects on Natural Protective Process F.R.	06/04

**Land Use, Land Management, and Aesthetics**

L1	F.R. Land Use Study	07/04
L2	F.R. Land Mgmt Study	08/04
L3	F.R. Comprehensive Plan Consistency Evaluation	05/04
L4	F.R. Aesthetic/Visual Resources	07/04
L5	F.R. Fuel Load Management Evaluation	05/04
Land Use, Management, and Aesthetics Study Reports Errata		01/05

**Recreation and Socioeconomics**

R1	F.R. Vehicular Access Study	09/03
R2	F.R. Recreation Safety Assessment	01/04

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Recreation and Socioeconomics (continued)		
R3	F.R. Assess Relationship of Project Operations and Recreation	05/04
R4	F.R. Assess Relationship of Fish/Wildlife Management of Recreation	05/04
R5	F.R. Assessment of Recreation Areas Management	06/04
R6	F.R. ADA Accessibility Assessment	09/03
R7/R9/R13		
	I.R. Reservoir Boating - Existing Recreation Use-Recreation Surveys, Critical Path Recreation Field Studies	02/03
R7	F.R. Reservoir Boating	03/04
R8	F.R. Recreation Carrying Capacity	06/04
R9	F.R. Existing Recreation Use Study	02/04
R10	F.R. Recreation Facility Inventory and Condition Report	09/03
R11	F.R. Recreation and Public Use Impact Assessment	01/04
R12	F.R. Projected Recreation Use	05/04
R13	F.R. Recreation Surveys	12/04
R14	F.R. Assess Regional Recreation Barriers to Recreation	02/04
R15	F.R. Recreation Suitability	02/04
R16	F.R. Whitewater and River Boating	01/04
R17	F.R. Recreation Needs Analysis	06/04
R18	F.R. Recreation Activity, Spending, and Associated Economic Impacts	05/04
R19	F.R. Fiscal Impacts	05/04
R18/R19		
	Recreation Activity, Spending, and Associated Economic Impacts	
	F.R. Phase 1 Background Report - Economic and Fiscal Conditions	05/03
	D.R. Phase 2 Background Report - Property Value Analysis using a Hedonic Property-Pricing Model	01/04
	D.R. Phase 2 Background Report - Recreation and Tourism Economy in Oroville	01/04
Recreation and Socioeconomics Study Reports Addenda and Errata		01/05